

R E M A R K S

Claims 1 to 14, 16 and 17 as set forth in Appendix II of this paper are now pending in this case. Claim 15 been canceled, Claims 9, 13 and 14 have been amended, and Claims 16 and 17 have been added, as indicated in the listing of the claims.

Accordingly, applicants have amended Claim 9 to depend upon Claim 7 instead of Claim 5, and have deleted the explanatory embodiments of the radicals  $R^1$  and  $R^5$  which are introduced with the wording "such as" in Claims 13 and 14. The respective embodiments have been made the subject matter of new Claims 16 and 17. No new matter has been added.

Additionally, applicants have revised the specification to include a brief description of the drawing on page 11,<sup>1</sup> and have added the designation "Figure 1" to the drawing. No new matter has been added.

The Examiner objected to the disclosure for containing instances where words were incomplete, mentioning as examples

- the word "us" on page 1, indicated line 16, of the application, which should read --use--;
- the word "stab e" on page 3, indicated line 3, of the application, which should read --stable--; and
- the word "t tragonal" on page 3, indicated line 4, of the application, which should read --tetragonal--.

Applicants herewith enclose a copy of the copy of the application as filed. The Examiner will note that the copy of the application as filed which was retained in the files of applicants' representatives does not contain the instances of incomplete words which are present in the copy of the application as filed as is available on the PAIR system of the U.S. PTO. While applicants are unable to explain how the discrepancies between the text of the application as filed and the copy thereof which is available on the PAIR system of the U.S. PTO occurred, it is -in light of the copy of the application as filed- not deemed necessary to effect any corrections in the application as filed.

Additionally, the Examiner objected to the description for failing to include a brief description of the drawings. Applicants have revised page 11 of the application to include such a brief description so that the Examiner's reasons are no longer applicable.

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<sup>1</sup> Cf. page 13, indicated liens 31 and 32, of the application.

In light of the foregoing and the attached it is therefore respectfully requested that the Examiner's objections be withdrawn. Favorable action is solicited.

The Examiner objected to the drawing for not being clearly labeled as "Figure 1". Applicants herewith submit a replacement sheet which includes the designation of the drawing as Figure 1. It is therefore respectfully requested that the Examiner's respective objection be withdrawn. Favorable action is solicited.

The Examiner objected to Claim 15 for being improperly dependent, and rejected Claim 15 under 35 U.S.C. §102(b) as being anticipated by the teaching of *Wulff-Döring et al.* (US 6,034,029). Applicants have canceled Claim 15. Withdrawal of the Examiner's objection and rejection is therefore respectfully solicited.

The Examiner rejected Claim 9 under 35 U.S.C. §112, ¶2, as being indefinite for lacking proper antecedent basis for the requirement that the molar ratio of nickel to copper in a composition be greater than 1 because Claim 5 failed to require that the composition comprise nickel and copper. Applicants have amended Claim 9 to depend upon Claim 7 instead of Claim 5. Claim 7 requires that the composition comprises particular amounts of nickel and copper, and therefore provides proper antecedent basis for the requirements set forth in Claim 9.

The Examiner rejected Claims 13 and 14 under 35 U.S.C. §112, ¶2, as being indefinite for defining the radicals  $R^1$  and  $R^5$  by citing broad ranges and, at the same time, narrower ranges introduced by "such as". Applicants have deleted the narrower ranges from the definition of the radicals  $R^1$  and  $R^5$ , and have added new Claims 16 and 17 drawn to the deleted embodiments.

In light of the foregoing and the attached, it is therefore respectfully requested that the rejection of Claims 9, 13 and 14 under Section 112, ¶2, be withdrawn. Favorable action is solicited.

The Examiner rejected Claims 1 to 12 under 35 U.S.C. §112, ¶1, taking the position that the description of the invention failed to be enabling for the conversion of primary amines which are outside of the scope of applicants' formulae (II) and (IIa). In particular, the Examiner asserted that the level of predictability in the art was low, and that the guidance which is provided in applicants' disclosure was insufficient to reasonably enable a person of ordinary skill in the art to employ primary amines other than the amines which are

represented by applicants' formulae (II) and (IIa) in the condensation reaction defined in applicants' claims.

It is respectfully urged that an assertion by the PTO that the enabling disclosure is not commensurate in scope with the protection sought must be supported by evidence or reasoning substantiating those doubts.<sup>2</sup> The CCPA articulated this approach in In re Marzocchi:<sup>3</sup>

*... it is incumbent on the Patent Office, whenever a rejection on this basis is made, to explain why it doubts the truth or accuracy of any statement in a supporting disclosure and to back up assertions of its own with acceptable evidence or reasoning which is inconsistent with the contested statement. Otherwise there would be no need for the applicant to go to the trouble and expense of supporting his presumptively accurate disclosure.*<sup>4</sup>

The Examiner's argument that chemistry is an experimental science and the predictability in the chemical art is low is not deemed to amount to acceptable evidence or reasoning which rebuts the presumption that the disclosure of a claimed invention is adequate. Also, a specification need not contain working examples if the invention is otherwise disclosed in such a manner that one of ordinary skill in the art will be able to practice it without undue experimentation.<sup>5</sup>

The amount of guidance or direction which is needed to enable the invention is inversely related to the amount of knowledge in the state of the art as well as the predictability in the art.<sup>6</sup> The more that is known in the prior art about the nature of the invention, how to make, and how to use the invention, ie. the more predictable the art is, the less information needs to be explicitly stated in the specification. The question whether the pertinent art is, with regard to a particular feature of a claimed invention, predictable or not is closely related to the knowledge which is readily available at the time at which an invention is made.<sup>7</sup> Based on the knowledge already acquired in the art

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<sup>2</sup> see In re Dinh-Nguyen, 492 F.2d 856, 858, 181 USPQ 47, 49 (CCPA 1974); In re Bowen, 492 F.2d 859, 862, 181 USPQ 48, 51 (CCPA 1974); In re Armbruster, 512 F.2d 676, 185 USPQ 152 (CCPA 1975)

<sup>3</sup> Cf. 439 F.2d 220, 169 USPQ 637 (CCPA 1971).

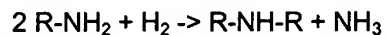
<sup>4</sup> Ibid. at 223-23, 169 USPQ at 369-70, footnote and citation omitted.

<sup>5</sup> See eg. In re Borkowski, 422 F.2d 904, 164 USPQ 642 (CCPA 1970).

<sup>6</sup> In re Fisher, 427 F.2d 833, 839, 166 USPQ 18, 24 (CCPA 1970).

<sup>7</sup> See eg. the assessment of the scope and content of the prior art addressed in In re Wands, 858 F.2d 731, 8 USPQ2d 1400 (CAFC 1988).

with regard to, for example, amines which are suitable for catalyzed reactions, it is therefore generally possible for a person of ordinary skill in the pertinent technology to extrapolate the results of representative investigations and to reasonably assess whether a group amines which is known in the prior art will act as equivalents under the circumstances and conditions of the investigated procedure. Applicants' claims are drawn to a process for preparing a symmetrical secondary amine by reacting a primary amine in the presence of hydrogen and in the presence of a special catalyst. The underlying reaction



is a condensation reaction which is well known in the art.<sup>8</sup> Based upon the technical background knowledge which is *inter alia* reflected in applicants' disclosure it is apparent that a person of ordinary skill in the art has no reason to expect that the nature of R of the primary amine R-NH<sub>2</sub> which is employed in the process has any significant impact on the condensation of two such molecules. The respective pertinent background knowledge is, for example, documented in the disclosure of EP 412 613 (Dumaux et al.) which is addressed on page 1, indicated lines 29 and 30, of the application, and a copy of which was provided by applicants with their Information Disclosure Statement.<sup>9</sup> Accordingly, a person of ordinary skill in the art would reasonably expect that a condensation reaction of one primary amine in the presence of a particular catalyst is representative for the behavior which is exhibited by all other primary amines when they are condensed in the presence of the respective catalyst.

As the Examiner correctly noted in the context of the reasons why the subject matter of Claims 13 and 14 was deemed to be allowable: the "key to the instant invention is the precipitation onto monoclinic, tetragonal or cubic zirconium dioxide of catalytically active components"<sup>10</sup> rather than the nature of the primary amine which is employed in the condensation process. Accordingly, and in light of the foregoing remarks, it is respectfully requested that the rejection of Claims 1 to 12 under Section 112, ¶1, be withdrawn. Favorable action is solicited.

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<sup>8</sup> Cf., for example, page 1, indicated lines 9 to 37, of the application, and the prior art addressed therein.

<sup>9</sup> Note in particular the explanations and remarks on pages 2 to 8 of EP 412 613.

<sup>10</sup> Cf. page 7, lines 4 and 5, of the Office action dated May 03, 2005.

In light of the foregoing and the attached, the application should be in condition for allowance. Early action by the Examiner would be greatly appreciated by applicants.